

Patent claims

1. A machine with a rotating piston, enclosing workspaces with alternately changing volumes e.g. compressors, pumps, or engines, where the piston is embedded inside the cylinder formed by two sidewalls and by curved covering, characterised by that the piston in the cylinder partly in a rotating way around two parallel axis of rotation, which are normal to the cylinder sides, partly in a sliding way in two directions normal one to the other and also parallel to the revolving axes,

2. Machine according to the claim 1, characterised by that it is provided with two guiding shafts with parallel axes (7, 8) of rotation, which guiding shafts (71, 81) are in the perpendicular direction to the axes (7, 8) of rotation provided with guiding members (5, 6), e.g. gliding pins or pins on which the piston (2) is mounted in the sliding way by means of the sliding members (3, 4), e.g. grooves or bushes.

3. Machine according to the claims 1 and 2, characterised by that one of its guiding shafts (71, 81) is mounted in the cylinder side wall (11) mounted in the sliding way in the direction of plane interlaid with the rotation axes (7, 8).

4. Machine according to the claims 1 and 2,

c h a r a c t e r i s e d b y t h a t

the piston (2) is mounted in the revolving way / pivoted on the supporting eccentric (10) connected with the supporting shaft (91), which is mounted in the revolving way in / pivoted on the minimum one cylinder side wall (11) in parallel with these axes (7, 8) of the piston (2) rotation and between these axes (7, 8), while the eccentricity of the supporting eccentric (10) is equal to one half (1/2) of the distance between the axes (7, 8) of rotation.

5. Machine according to one of the claims 1 through 4

c h a r a c t e r i s e d b y t h a t

minimum one of the guiding shafts (71, 81) is created as the guiding ring (72, 82) mounted in the revolving way in pivoted on the side wall (11) and provided on its front side facing the piston (2) with the guiding member (51, 61), e.g. projection or groove which the sliding members (31, 41), e.g. grooves or projections connected with the piston (2) are mounted on.

6. Machine according to the claim 5,

c h a r a c t e r i s e d b y t h a t

the guiding ring(72,82) is provided on its front side averted from the piston (2) with additional guiding members (52,62), which are arranged/laid out perpendicularly to the guiding members (51,61) on the side facing the piston (2) and in which the auxiliary gliding pin (14) is mounted in the revolving way on the guiding eccentric (15) mounted on the supporting shaft (91) in parallel with the supporting eccentric (10) and turned by 180 degrees in relation to it.

7. A machine, according to the claim 1 and 2,
c h a r a c t e r i s e d b y t h a t
the spaces among the sliding components (3, 4, 31, 41) e.g.
pivots, or lugs, optionally ancillary glide (14) on one side
and the conducting components (5, 6, 51, 61, 52, 62) e.g.
casings, or slots on the other side are enclosed and equipped
by the vents for lubricant inlet and outlet.